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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,577	08/27/2001	Nobuyuki Goto	0102/0177	2735

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EXAMINER	
TOPGYAL, GELEK W	
ART UNIT	**PAPER NUMBER**
2616	

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/938,577	GOTO ET AL.	
	Examiner	Art Unit	
	Gelek Topgyal	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *August 27, 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 August 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5/27/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5 and 8 are rejected under 35 U.S.C. 102(b) as being unpatentable over Vallone.

Claim 1 teaches a program-signal recording and reproducing apparatus comprising:

- first means for recording a program signal on a recording medium (Col. 4, lines 38-40 teaches that the program is recorded on a medium);
- second means for reproducing the program signal from the recording medium (Col. 7 lines 30-42 teaches that a program is read from the medium; it is further reproduced by displaying the program on a TV 716 as seen in Fig. 7);
- third means for generating first time information in accordance with lapse of time (Col. 22, lines 20-33 describes display information which includes the means for generation of time);
- fourth means for generating second time information from the program signal reproduced by the second means, the second time information representing one of (1) a time at which the program signal was recorded by the first means (col. 12, lines 36-40 describes that when recording a particular program, information about

when it was recorded can be recorded onto a medium) and (2) a time at which the program signal was broadcasted (In col. 21, lines 29-32, Vallone describes that the program guide information, which includes the broadcast time (start and stop time), is recorded onto a medium, the same medium where the program is stored. Col. 22, lines 20-33 describes that the program guide information is read from the medium and used to generate the broadcast time);

- and fifth means for superimposing on-screen information on the program signal reproduced by the second means, the on-screen information representing (1) a picture portion indicative of a time (Fig. 26, element 2601 shows a time scale), (2) a first mark positionally corresponding to the first time information generated by the third means (Fig. 26, element 2608 is a position indicator of the current time), and (3) a second mark positionally corresponding to the second time information generated by the fourth means (In col. 18, lines 39-41 describes that the green cache bar 2602 within the trick play bar 2601 on Fig. 26 indicates how much of the cache bar is filled. In the case where a recorded program is played back, the green cache bar corresponds to the length of the program. Therefore the beginning of the cache bar 2602, where the color green starts to be displayed, is a mark that positionally corresponds to the time of the beginning of the broadcast).

Regarding claim 2, the first time information is recorded as the second time information along with the program signal as shown in the "Now Showing" menu in Fig. 18.

Claim 5 teaches a program-signal recording and reproducing apparatus comprising:

- first means for recording a program signal on a recording medium (Col. 4, lines 38-40 teaches that the program is recorded on a medium);
- second means for generating first time information representing the present time (Col. 22, lines 20-33 describes display information which includes the means for generation of present time);
- third means for generating second time information representing one of (1) a time at which the program signal was recorded by the first means (col. 12, lines 36-40 describes that when recording a particular program, information about when it was recorded can be recorded onto a medium) and (2) a time at which the program signal was broadcasted (In col. 21, lines 29-32, Vallone describes that the program guide information, which includes the broadcast time (start and stop time), is recorded onto a medium, the same medium where the program is stored. Col. 22, lines 20-33 describes that the program guide information is read from the medium and used to generate the broadcast time);
- fourth means for determining a specified time point which precedes the present time represented by the first time information generated by the second means (Col. 20, lines 15-17 describes a system where a jump button 1414 on the remote control 1401 can be used to access bookmarks that have been placed at certain time points on the program);

and fifth means for finding a segment of the program signal on the recording medium according to the specified time point determined by the fourth means and the second

time information generated by the third means, the program-signal segment relating to the second time information corresponding to the specified time point, and for reproducing the found segment and subsequent segments of the program signal from the recording medium (col. 15, lines 49-58 discloses that once a user presses the jump button 1414, the corresponding bookmark is accessed and the program continues to be displayed from that particular bookmark).

Claim 8 teaches a program-signal recording and reproducing apparatus comprising:

- first means for recording a first program signal on a recording medium while leaving only a latest temporally-continuous portion of the first program signal in the recording medium as a cached portion (col. 5 lines 26-40 discloses four DMA engines that have circular storage buffers which stores only a finite amount of video and data);
- second means for generating first time information representing the present time (Col. 22, lines 20-33 describes display information which includes the means for generation of present time);
- third means for generating second time information representing one of (1) a time at which the first program signal was recorded by the first means and (2) a time at which the first program signal was broadcasted (In col. 21, lines 29-32, Vallone describes that the program guide information, which includes the broadcast time (start and stop time), is recorded onto a medium, the same medium where the program is stored. Col. 22, lines 20-33 describes that the program guide information is read from the medium and used to generate the broadcast time);

- fourth means for determining a specified time point which precedes the present time represented by the first time information generated by the second means (Col. 20, lines 15-17 describes a system where a jump button 1414 on the remote control 1401 can be used to access bookmarks that have been placed at certain time points on the program);
- fifth means for accepting a head-retrieval command (Vallone teaches in Fig. 14 of a replay button 1415 on the remote control 1401. Vallone also teaches in col. 15, lines 14-18 that a show either recorded (Fig. 17, elements 1702-1704 represent recorded shows) or currently recording (Fig. 17, element 1713 represents a program that is currently recording), can be viewed immediately by selecting the play button (Fig. 18, element 1801));
- sixth means responsive to the head-retrieval command accepted by the fifth means for finding a segment of the latest temporally-continuous portion of the first program signal on the recording medium according to the specified time point determined by the fourth means and the second time information generated by the third means, the program-signal segment relating to the second time information corresponding to the specified time point, and for reproducing the found segment and subsequent segments of the program signal from the recording medium during a cache playback mode of operation (Vallone teaches in col. 19, lines 27-32 that when a user is watching live TV, the option to play a buffered/cached portion is available in the same manner as an instant replay

operation in sports. The replay button 1415 displays the segment and its subsequent segments from a previous time point);

- seventh means for recording a second program signal on the recording medium in response to a designated record start timing (Vallone teaches in col. 20 lines 23-31 that multiple tuners incorporated into the system will allow for recording of multiple programs);
- and eighth means responsive to the head-retrieval command accepted by the fifth means for reproducing the second program signal from the recording medium during a time shift playback mode of operation (Vallone teaches that in "Now Showing" menu in Fig. 18, a user has the ability to command the system to start/play the program. Once the user selects the play option 1801 in the menu, the program content is reproduced).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3, 4, 6, 7, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vallone. Claim 3 teaches a program-signal recording and reproducing apparatus for recording a program signal on a recording medium, and reproducing an already-recorded portion of the program signal which is being recorded on the recording medium, the apparatus comprising:

- time information generating means for generating time information in accordance with lapse of time (Vallone teaches in col. 22, lines 20-33 that the display information includes the means for generation of time);
- recording means for recording the time information generated by the time information generating means or time information indicating time at which the program signal is broadcasted on the recording medium together with the program signal (Vallone teaches in col. 21, lines 29-32 that the program guide information, which includes the broadcast time (start and stop time) and the current time, is recorded onto the same medium as that of the program signal);
- a head retrieval command input means for performing a program head retrieval command (Vallone teaches in col. 19, lines 26-27 a jump button 1414 and a replay button 1415 on the remote control that allows for program retrieval);
- and first head retrieval reproduction means for, when the program head retrieval command is performed by the head retrieval command input means, obtaining present time information generated by the time information generating means (Vallone teaches col. 22, lines 20-33 that the display information includes the means for generation of time) and performing head retrieval reproduction of the program signal recorded at time of 00-minute or 30-minute in an hour which is previous to the present time represented by the obtained present time information (Vallone teaches in col. 19, lines 26-27 of a replay button 1415 that allows the user to jump back in time to play a section previous to the current time. Vallone fails to teach that reproduction of the program takes place at the

00-minute or 30-minute. It would have been obvious to one of ordinary skill in the art at the time the invention was made to jump forward or backward to the 00th or the 30th minute in order to search for a desirable recorded video signal at those points because Vallone teaches that the time span is adjustable).

Claim 4 teaches a program-signal recording and reproducing apparatus as recited in claim 3, further comprising:

- a cache playback mode in which a program signal temporally continuous from past to now is always recorded on a recording medium while a prescribed amount is a limit, and an already-recorded portion of the program signal which is being recorded is reproduced (Vallone teaches in col. 19, lines 27-32 that when a user is watching live TV, the option to play a buffered/cached portion is available in the same manner as an instant replay operation in sports. The instant replay is a cache playback equivalent);
- a time shift playback mode in which, with respect to a program signal recorded on the recording medium on the basis of a record start timing decided by operation by a user (Vallone teaches in col. 17, lines 16-25 that the user can instruct the system to record a particular program he or she is watching. Recording of a program can also be recorded by way of scheduling as described in col. 23, lines 10-18), and an already-recorded portion of the program signal which is being recorded is reproduced (Vallone teaches in col. 15, lines 14-18 that a show either recorded (Fig. 17, elements 1702-1704 represent recorded

shows) or currently recording (Fig. 17, element 1713 represents a program that is currently recording), can be viewed immediately by selecting the play button (Fig. 18, element 1801));

- and second head retrieval reproduction means for, when the program head retrieval command is performed by the head retrieval command input means, performing head retrieval reproduction of the program signal from the record start timing (Vallone teaches that by selecting the play button (Fig. 18, element 1801), the recorded program begins playback from the head/beginning of the program);
- wherein the head retrieval reproduction is performed by the first head retrieval reproduction means in the cache playback mode (described in claim 3 rejection), and the head retrieval reproduction is performed by the second head retrieval reproduction means in the time shift playback mode (as described previously in the claim 4).

Claim 6 teaches a program-signal recording and reproducing apparatus as recited in claim 5, wherein the specified time point corresponds to time whose minute part is 00 (Vallone teaches in col. 19, lines 26-27 of a replay button 1415 that allows the user to jump back in time to play a section previous to the current time. Vallone fails to teach that reproduction of the program takes place at the 00-minute. It would have been obvious to one of ordinary skill in the art at the time the invention was made to jump forward or backward to the 00^{th} minute in order to search for a desirable recorded video signal at those points because Vallone teaches that the time span is adjustable).

Claim 7 teaches a program-signal recording and reproducing apparatus as recited in claim 5, wherein the specified time point corresponds to time whose minute part is 30 (Vallone teaches in col. 19, lines 26-27 of a replay button 1415 that allows the user to jump back in time to play a section previous to the current time. Vallone fails to teach that reproduction of the program takes place at the 00-minute. It would have been obvious to one of ordinary skill in the art at the time the invention was made to jump forward or backward to the 00th minute in order to search for a desirable recorded video signal at those points because Vallone teaches that the time span is adjustable).).

Claim 9 teaches a program-signal recording and reproducing apparatus as recited in claim 8, wherein the specified time point corresponds to time whose minute part is 00 (Vallone teaches in col. 19, lines 26-27 of a replay button 1415 that allows the user to jump back in time to play a section previous to the current time. Vallone fails to teach that reproduction of the program takes place at the 00-minute. It would have been obvious to one of ordinary skill in the art at the time the invention was made to jump forward or backward to the 00th minute in order to search for a desirable recorded video signal at those points because Vallone teaches that the time span is adjustable).

Claim 10 teaches a program-signal recording and reproducing apparatus as recited in claim 8, wherein the specified time point corresponds to time whose minute part is 30 (Vallone teaches in col. 19, lines 26-27 of a replay button 1415 that allows the user to jump back in time to play a section previous to the current time. Vallone fails to

teach that reproduction of the program takes place at the 00-minute. It would have been obvious to one of ordinary skill in the art at the time the invention was made to jump forward or backward to the 00^{th} minute in order to search for a desirable recorded video signal at those points because Vallone teaches that the time span is adjustable).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gelek Topgyal whose telephone number is 517-272-8891. The examiner can normally be reached on 8am -5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GT

THAI TRAN
PRIMARY EXAMINER